## AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

What is claimed is:

1. - 29. (Cancelled)

30. (New) A method for reducing undesired interference from a radio signal source in a wireless radio communication system having a plurality of radio base stations and mobile stations, each radio base station having a multiple of antenna elements, which antenna elements are mounted in each others vicinity such that their beam patterns have a predetermined overlap, comprising the steps of:

measuring interference by an interference control controlling a bearing of the at least two or more beam patterns of the two or more antenna elements; and

adjusting the bearing of the area of the overlap of the beam patterns in a substantial horizontal plane of at least two of the antenna elements depending on the interference measurements.

31. (New) The method according to claim 30, wherein the bearing of the overlap of the beam patterns in a substantial horizontal plane of at least two antenna elements is controlled by interference control such that the bearing substantially coincides with a position of the interfering signal source.

32. (New) The method according to claim 31, wherein the overlap of the beam patterns in a substantial horizontal plane are beam patterns from two adjacent positioned antenna elements.

33. (New) The method according to claim 32, wherein the bearing of the overlap of the beam patterns in a substantial horizontal plane, being the overlap formed by beam patterns from two adjacent positioned antenna elements, depends on the signal strength of the interfering signal source, received by the two adjacent positioned antenna elements.

34. (New) The method according to claim 30, wherein the area of the overlap of the beam patterns in a substantial horizontal plane is adjustable, depending on the interference measurements deployed by an interference control controlling a bearing of one or more beam patterns of one or more antenna elements.

35. (New) The method according to claim 30, wherein the phase of one or more signals, received by antenna elements, is adapted by controllable phase shift elements, and fed to the radio base station, where the amount of phase adapting depends on the interfering signal of the interfering signal source.

36. (New) The method according to claim 30, further comprising the step of tilting one or more of the antenna elements, wherein the amount of tilting depends on the interfering signal of the interfering signal source.

37. (New) The method according to claim 30, further comprising the steps of:

detecting by measurement an occurrence of an interfering signal at two or more antenna elements above a threshold value and storing the value of the measured interfering signal;

selecting two adjacent antenna elements having an overlap of their beam patterns, which antenna elements receive the two highest interfering signal values and storing the average value of the interfering signals;

adjusting a bearing of the overlap of the two beam patterns of the two selected adjacent antenna elements, such that the bearing slides a step in a direction from the antenna element with the second highest received interfering signal, by adjusting the

two antenna elements controlled by tilt/bearing control. under control by interference control in the direction;

measuring a new value of the interfering signal and comparing the new value of the interfering signal with the value of the stored interfering signal and storing the new value;

repeating the adjusting step as long as the measured interfering signal has a value above or equal to the threshold value; and

stopping if a new measured interfering signal has a value below the threshold value, adjust the bearing of the overlap of the two beam patterns of the two selected adjacent antenna elements to a predetermined default value.

38. (New) The method according to claim 30, further comprising the step of performing the adjustment of the beam patterns of the antenna elements mechanically.

39. (New) The method according to claim 30, further comprising the step of implementing the method in a cellular communication system.

40. (New) A method for reducing undesired interference from a radio signal source in a wireless radio communication system comprising radio base stations and mobile stations, each radio base station having a multiple of antenna elements, which antenna elements are mounted in each others vicinity such that their beam patterns have a predetermined overlap, comprising the steps of:

adjusting at least two of the antenna elements so as to adjust the area of the overlap of the beam patterns in a substantial horizontal plane; and

controlling a bearing of the one or more beam patterns of the one or more antenna elements depending on interference measurements deployed by an interference control.

41. (New) The method according to claim 40, wherein the area of the overlap of the beam patterns in a substantial horizontal plane of the at least two antenna

elements is controlled by interference control such that the area substantially coincides with a position of the interfering signal source.

42. (New) The method according to claim 41, wherein the overlap of the beam patterns in a substantial horizontal plane are beam patterns from two adjacent positioned antenna elements.

43. (New) The method according to claim 42, wherein the area of the overlap of the beam patterns in a substantial horizontal plane, being the overlap formed by beam patterns from two adjacent positioned antenna elements, depends on the signal strength of the interfering signal source.

44. (New) The method according to claim 40, wherein the bearing of the overlap of the beam patterns in a substantial horizontal plane is adjustable, depending on the interference measurements deployed by an interference control controlling a bearing of two or more beam patterns of two or more adjacent positioned antenna elements .

45. (New) The method according to claim 40, wherein the phase of one or more signals, received by antenna elements, is adapted by controllable phase shift elements and fed to the radio base station, where the amount of phase adapting depends on the interfering signal of the interfering signal source.

46. (New) The method according to claim 40, wherein the one or more antenna elements are tilted, wherein the amount of tilting depends on the interfering signal of the interfering signal source.

47. (New) The method according to claim 40, further comprising the steps of:

detecting by measurement an occurrence of an interfering signal at two or more antenna elements above a threshold value and store the value of the measured interfering signal;

selecting two adjacent antenna elements having an overlap of their beam patterns, which antenna elements receive the two highest interfering signal values and storing the average value of the interfering signals;

adjusting an area of the overlap of the two beam patterns of the two selected adjacent antenna elements, such that the area is reduced, by adjusting the antenna element with the highest received interfering signal into a direction from the antenna element with the second highest received interfering signal, wherein the adjustment is controlled by tilt/bearing control, under control by interference control in the direction;

measuring a new value of the interfering signal and comparing the new value of the interfering signal with the value of the stored interfering signal and storing the new value;

adjusting subsequently an area of the overlap of the two beam patterns of the two selected adjacent antenna elements, such that the area is reduced, by adjusting the antenna element with the highest received interfering signal into a direction from the antenna element with the second highest received interfering signal, if the new received interfering signal is lower than the stored interfering signal, or opposite increase the area if the if the new received interfering signal is higher than the stored interfering signal;

repeating the adjusting step as long as the measured interfering signal has a value above or equal to the threshold value; and

stopping if a new measured interfering signal has a value below the threshold value, adjust the bearing of the overlap of the two beam patterns of the two selected.

48. (New) The method according to claim 47, wherein the adjusting steps are executed on the two selected antenna elements.

49. (New) The method according to claim 40 wherein the adjustment beam patterns of the antenna elements is performed mechanically.

50. (New) The method according to claim 40, wherein the method is implemented in a cellular communication system.

51. (New) An interference control system within a wireless radio communication system, the interference control system comprising:

two or more antenna elements having adjustable beam patterns in a substantial horizontal plane;

two or more phase shift devices, each communicatively coupled to a respective antenna element and adapted to receive a first signal from the respective antenna element and adapted to provide the first signal with an amount of phase shift to a radio base station's receiving side:

interference control means and tilt/bearing control means;

beam pattern adjustment devices coupled to a respective antenna element and controlled by the tilt/bearing control means under control of the interference control means;

the interference control means having inputs for receiving interference information from a radio base station controller and the first signal with an amount of phase shift from each phase shift device, and outputs to control the tilt/bearing control means and the phase shift devices, the interference control means being adapted to measure interference and adjust the bearing of the area of the overlap of beam patterns in a substantial horizontal plane of the at least two of the antenna elements depending on the interference measurements.

52. (New) The interference control system according to claim 51, wherein the beam pattern adjustment devices comprise mechanical actuators.

53. (New) The interference control system according to claim 51, wherein the beam pattern adjustment devices comprise electronic arrangements.

54. (New) The interference control system of claim 51, as implemented within a radio base station within a cellular communication network.

55. (New) An interference control system within a wireless radio communication system, the control system comprising:

two or more sets of antenna elements having adjustable beam patterns in a substantial horizontal plane, the two or more sets further comprising phase shift devices communicatively connected to the respective antenna element and adapted to receive a first signal from the respective antenna element and provide the first signal with an amount of phase shift to a radio base station's receiving side; and

beam pattern adjustment devices controlled by a tilt/bearing control under control of an interference control, wherein the interference control has inputs for receiving interference information from a radio base station controller and the first signal with an amount of phase shift from the phase shift devices, and wherein the interference control has outputs to control the tilt/bearing control and the phase shift devices, and wherein the interference control is adapted to measure interference and adjust the bearing of the area of the overlap of beam patterns in a substantial horizontal plane of the at least two of the antenna elements depending on the interference measurements.

56. (New) The interference control system according to claim 55, wherein the beam pattern adjustment devices are mechanical actuators.

57. (New) The interference control system according to claim 55, wherein the beam pattern adjustment devices are electronic arrangements.

58. (New) The interference control system according to claim 55, as implemented in a radio base station within a cellular communication network.